

(19)



JAPANESE PATENT OFFICE

## PATENT ABSTRACTS OF JAPAN

(11) Publication number: **11223207 A**(43) Date of publication of application: **17 . 08 . 99**

(51) Int. Cl

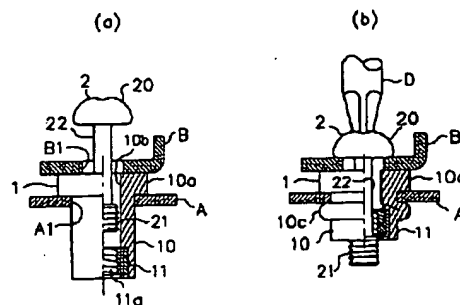
**F16B 35/00**(21) Application number: **10036576**(71) Applicant: **TOTO LTD**(22) Date of filing: **04 . 02 . 98**(72) Inventor: **FUJII TOSHITSUNA**(54) **PRESSING SCREW FOR BLIND NUT AND HOLE  
CLOSING TOOL**

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(57) Abstract:

**PROBLEM TO BE SOLVED:** To provide a pressing nut and the like for a blind nut, which can easily deform a rubber elastic body into a desired condition and also may not cause malfunction even though a tool having a larger torque is used.

**SOLUTION:** A connecting part 22 having smaller diameter than a screw part 21 and length projected from a nut 11 is arranged between the head part 20 of a pressing screw 2 and the screw part 21 so that when a screw-in torque reaches a desired value, the screwing condition of the whole screw part 21 screwed in the nut 11 of a blind nut 1 is finished. Even though the screw-in torque of the pressing screw 2 is increased by the compression deformation of the rubber elastic body 10 of the blind nut 1, when this torque becomes the desired value, the screw part 21 of the pressing screw 2 is pulled out from the nut 11 of the blind nut 1, therefore a condition is set up that the torque more than the desired value may not be applied to the pressing screw 2.



状態を示し、(b)は加圧ネジのブラインドナットへのねじ込みが終了した状態を示している。

【図3】この発明の他の実施の形態に係る孔塞ぎ具を示す図である。

【図4】図3で示される孔塞ぎ具で床パンの操作孔を塞いだ状態を示す断面図である。

【図5】床パンの操作孔周りを示す図である。

【図6】従来の加圧ネジの説明図であり、(a)はブラインドナットの説明図、(b)は従来の加圧ネジをこのブラインドナットにねじ込んで、2つの部材を連結して

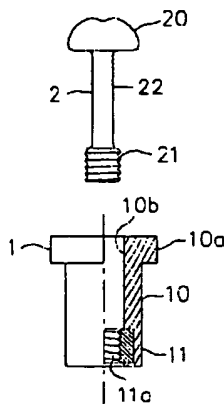
【図7】他の従来の加圧ネジの説明図であり、(a)はスリーブ付きブラインドナットの説明図、(b)はこのブラインドナットに従来の加圧ネジをねじ込んで、2つの部材を連結している状態を示す図である。

【図8】従来の孔塞ぎ具の説明図である。

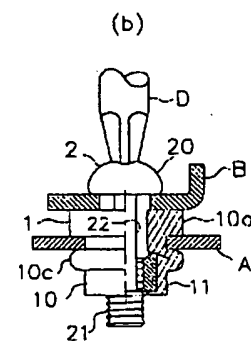
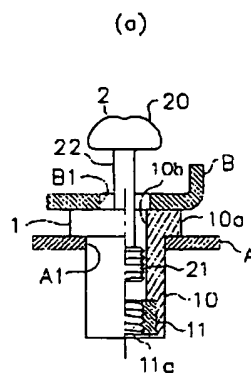
# 【符号の説明】

- 1    ブラインドナット
- 2    加圧ネジ
- 3    座金
- 4    カバー
- 5    孔塞ぎ具
- 10    ゴム状弾性体
- 10a   鍔部
- 10d   凹状部
- 11    ナット
- 20    頭部
- 20a   座金加圧部
- 20b   弾性体加圧部
- 21    ネジ部
- 22    連結部
- H    操作孔(塞ぎ孔)

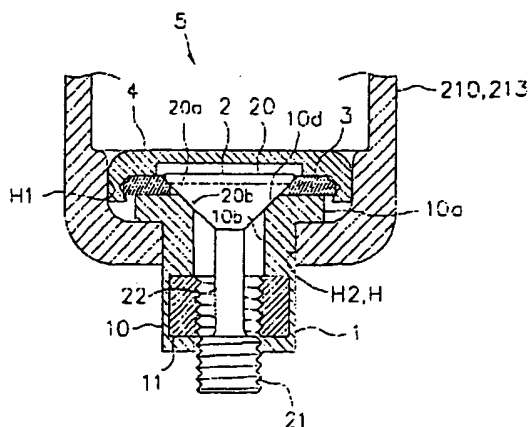
【図1】



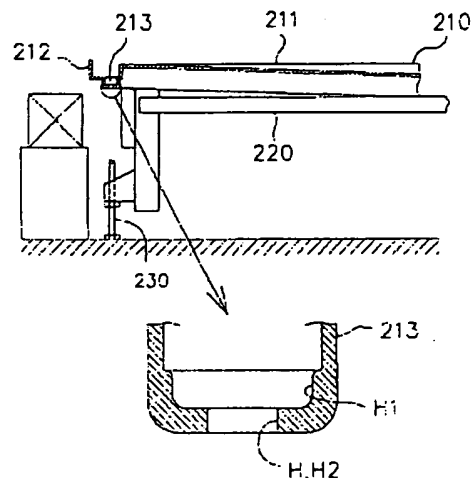
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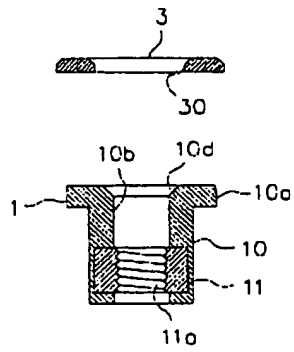
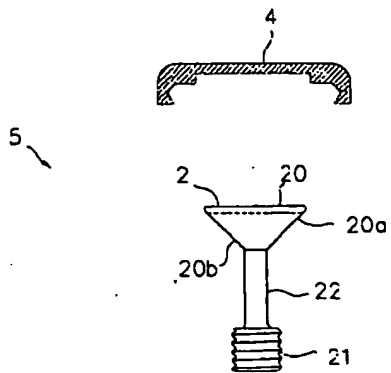
【図4】



【図5】

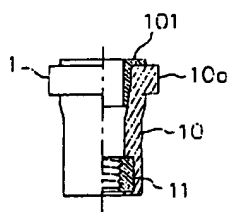


【図 3】

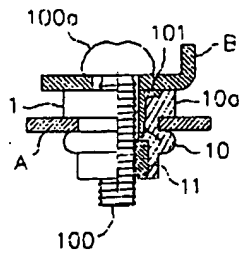


【図 7】

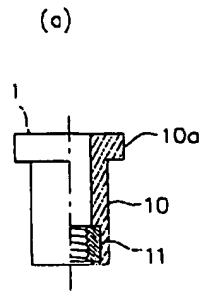
(a)



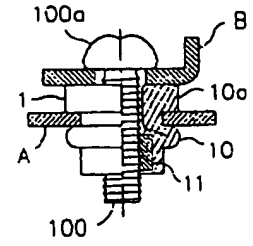
(b)



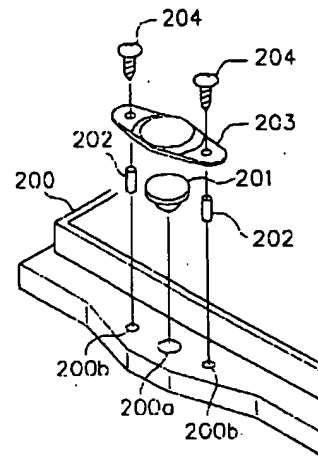
【図 6】



(b)



【図 8】



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File 351:Derwent WPI 1963-2004/UD,UM &UP=200419

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DIALOG(R)File 351:Derwent WPI

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WPI Acc No: 2001-452737/ **200149**

**Two-part multi-purpose wall plug fitting has bowed shanks capable of accepting high loads on thin walls**

Patent Assignee: REICHARD M (REIC-I)

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 20022001	U1	20010322	DE 2000U2022001	U	20001227	200149 B

Priority Applications (No Type Date): DE 2000U2022001 U 20001227

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 20022001	U1	9	F16B-013/00	

Abstract (Basic): **DE 20022001** U1

NOVELTY - A two-part plastic plug fitting is inserted in a pre-drilled hole and acts as an anchorage point on a wall (4) or ceiling. The plug consists of a first insert (10) which has two bowed shanks (14) linked at their tip by a bush with an inner thread, and at the outer end by a flat collar which rests against the wall outer face. The second insert is a hollow threaded bolt (20) with a cruciform recess for screwdriver and center hole. On insertion the hollow threaded bolt engages in and draws the bush towards the head, driving the shanks apart (P2). The hollow core receives a self-tapping screw (30) for the load.

USE - Multi-purpose wall or ceiling plug anchorage fitting.

ADVANTAGE - The plug is capable of accepting high loads and can be used in association with thin panels of 1 mm and above.

DESCRIPTION OF DRAWING(S) - Shows a cross-sectional side view of the assembled plug.

wall (4)

first insert (10)

shanks (14)

bolt (20)

self-tapping screw (30)

pp; 9 DwgNo 3/3

Derwent Class: Q61

International Patent Class (Main): F16B-013/00

International Patent Class (Additional): F16B-013/14

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